

Upland Wildlife Habitat Management–

Bird Boxes

Conservation Practice Job Sheet

NH-645

Definition:

Bird Boxes are used to supplement nesting sites for cavity nesting birds around wetlands and grasslands.

Program Notes:

Up to 4 bird boxes (2 pair) will be eligible for cost share per landowner. Martin boxes should only be planned in occupied landscapes.

Considerations:

- Currently there is a surplus of Purple Martin boxes around historic nesting locations in the state. At this time adding Martin boxes to these historic landscapes probably will not benefit Purple Martins.
- Consider the amount of cavity trees, snags or plan bird boxes with bird species which respond particularly well to them such as, American Kestrels.
- houses mounted on metal poles are less vulnerable to predators than houses nailed to tree trunks or hung from tree limbs.
- use no more than two small nest boxes for per acre.
- don't put bird houses near bird feeders.
- don't put more than one box in a tree.
- Place boxes at least 100 yards apart.
- With the exception of purple martins, cavity-nesting birds prefer not to share a house.
- Collect GPS points of installed houses to share with NH Audubon and discuss possible monitoring activities with landowners.

Bird houses should be placed in easily accessible areas for enjoyment and to facilitate clean out each year.

If you clean out your nest boxes after each brood has fledged, several pairs may use the nest throughout the summer. Many cavity nesting birds will not nest again in a box full of old nesting. Replace shavings in Kestrel boxes each year. Keep the doors closed or plug the openings on purple Martin houses until late April-early May. Discourage house swallows from occupying Martin houses.

Ventilation and Drainage

Drill ¼ inch holes in the floor for drainage and just under the roof for ventilation. A roof with sufficient slope and overhang offers some protection. Drilling the entrance hole on an upward slant may also help keep the water out.

Target Species: American Kestrel

Kestrel boxes have been shown to seriously increase the number of nesting kestrel pairs in an area. American Kestrels have shown a decline in New England in the past decade and are a species of greatest conservation need in New Hampshire.

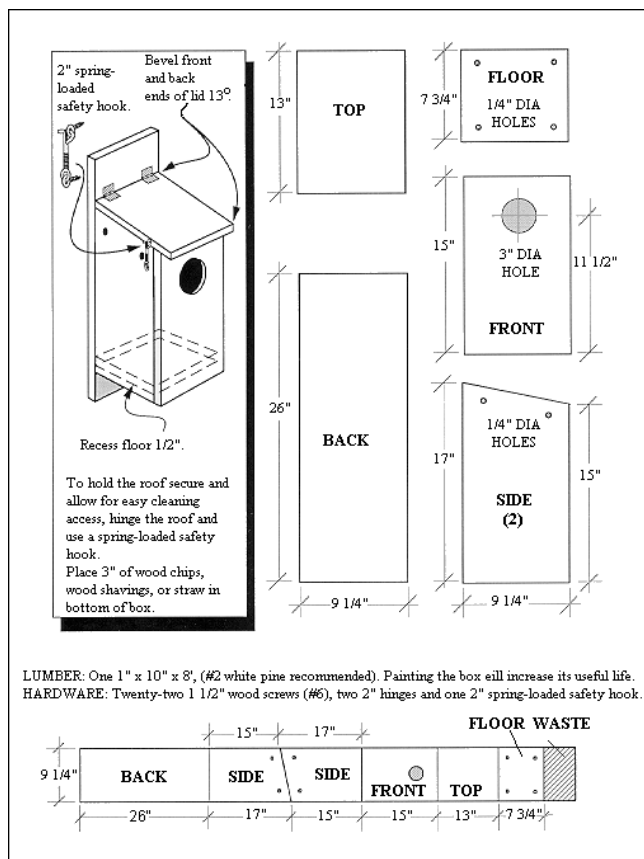
- Nest boxes should be placed in open fields, meadows or along hedgerows next to open areas. A grassy habitat should be near the box so kestrels can use it for hunting.
- Kestrel nest boxes should be firmly attached to a support structure, such as an isolated tree or post, 12 to 30

Operation and Maintenance

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feet above the ground and **spaced at least half a mile apart.**

- The support structure should have a sheet of aluminum secured around it to prevent squirrels from climbing and using the box.
- Place 2 to 3 inches of sawdust in the bottom of the nest box.
- Boxes should be installed no later than March 1st, to allow kestrels to find nest sites when first returning north.
- Clean out the kestrel box after each nesting season and replace the wood shavings for next season's nesting pair.



Above a typical bird box design for American Kestrels.

Target Species: Purple Martins

Purple Martins are endangered in New Hampshire and these boxes are only appropriate in areas with known current nesting sites.

You have the best chance of attracting martins if you put a house on the edge of a pond or river, surrounded by a field or lawn. Martins need a radius of about 40 feet of unobstructed flying space around their houses.

Before you decide on a house, take the time to think about what kind of pole you're going to put it on. Martins will occupy a house that's between ten and twenty feet off the ground. Some poles are less cumbersome than others.

Light-weight aluminum houses can be mounted on telescoping poles, providing easy access for maintenance and inspection. Because of their weight (well over 30 pounds), wood houses cannot be mounted on easy-access telescoping poles.

Discourage House Sparrows from nesting in Martin boxes and this is aided by most models which have doors which can be closed until late April for Purple Martins in New Hampshire.

Nest Box Dimensions for NH Birds

Species	Box floor inches	Box height inches	Entrance height inches	Entrance diameter inches	Placement height feet
Eastern & Western Bluebird	5x5	8-12	6-10	1-1/2	4-6
Great Crested Flycatcher	6x6	8-12	6-10	1-3/4	5-15
White- breasted Nuthatch	4x4	8-10	6-8	1-3/8	5-15
Purple Martin	6x6	6	1-2	2-1/4	6-20
Tree Swallows	5x5	6-8	4-6	1-1/2	5-15
House wrens	4x4	6-8	4-6	1-1/4	5-10
Carolina Wren	4x4	6-8	4-6	1-1/2	5-10
Screech Owls and Kestrel	8x8	12-15	9-12	3	10-30
Wood Ducks	10x18	10-24	12-16	4	10-20

References:

http://library.fws.gov/Bird_Publications/house.html#2a

http://www.birds.cornell.edu/Publications/Birdscope/Autumn2001/American_Kestrel.html

**For Landowners and Conservation Planners to
register their nest sites:**

<http://watch.birds.cornell.edu/nest/home/index>

For Kestrel Nests in Bird Boxes report to:

<http://www.newhampshireaudubon.org/volunteer.php>